Amendments to the Specification:

Please replace paragraph [20] with the following paragraph:

[20] Referring to FIG. 1, the communication device 101 converts the input samples 105 from the telephone line side of the communication device 101 to output data 108 on the PC side of the communication device 101. Conversely, the communication device 101 converts the input data 107 from the PC side of the communication device 101 to the output samples 109 on the telephone line side of the communication device 101. The commands 106 arrive at the communication device 101 from the PC side and control the mode of operation of the communication device 101. For example, one command may be "make a connection," and another command may be "send data." The communication device 101 may also output various indications 110 to the PC side. The input samples 105 may arrive at the communication device 101 in analog form and be converted to digital form by the communication device 101. The input data 107 and the commands 106 may arrive at the communication device 101 in digital form. Note that though the exemplary communication device 101 is a computer communication device, such as an ADSL modem, the scope of various aspects of the present invention should by no means be limited to characteristics of computer communication devices.

Please replace paragraph [21] with the following paragraph:

[21] The recording platform 103 may reside on or with the communication device 101. For example, the communication device 101 may include a memory 120, processor 121 and recording platform 103. The recording platform 103 may include hardware, software, or a combination thereof. For example, a processor 121 on the communication device 101 may execute recording platform 103 instructions to cause the digitized input samples 105, input data 107 and commands 106 to be stored as recorded input samples, input data, and commands 104.

Alternatively, for example, the recording platform may be a self-contained circuit or a stand-alone device that is communicatively coupled to other components of the communication device 101. Alternatively, for example, the recording platform may be integrated onto a communication device integrated circuit or multi-chip module. Accordingly, the scope of various aspects of the present invention should not be limited to particular characteristics and configurations of the recording platform 103.

Please replace paragraph [25] with the following paragraph:

[25] The computer 202 may, for example, be a personal computer (PC) or a network workstation. Such a computer 202 typically has a memory device containing software instructions and a processor for executing the software instructions. The computer 202 includes playback software 204, which includes a model of the communication device 101. For example, as illustrated in FIG. 2, the playback software 204 may include a bit-exact software model of the communication device 101 (*e.g.*, an ADSL modem) ~~101~~. In accordance with an aspect of the present invention, the playback software 204 may, for example, run as an application on a PC or workstation under a ~~Windows~~ WINDOWS or ~~Linux~~ LINUX operating system. The playback software 204 may, for example, reside on a hard disk of the computer 202 or a compact disc or DVD.

Please replace paragraph [28] with the following paragraph:

[28] In accordance with an aspect of the present invention, an operator executes the playback software 204 on the computer 202. The playback software ~~instructions~~ 204, when executed, causes the reading of the recorded input information from the memory device 102. The playback software 204 then operates the communication device model according to the recorded input data, input samples and commands 104. The operator may also execute debugging software 205, which allows the operator to control and observe the operation of the communication device

model as the communication device model operates in accordance with the recorded input information.

Please replace paragraph [32] with the following paragraph:

[32] The communication device may gather the real-time information internally. The communication device may direct the recording of the real-time information in a memory device external to the communication device. For example, the communication device may cause the real-time information to be written to the hard drive of a computer connected to the communication device. The communication device may optionally be driven as a ~~Windows~~ WINDOWS operating system device driver in a computer and write the real-time information directly to the hard drive of the computer. The communication device may also cause the real-time information to be sent to a computer coupled to the communication device through a computer network, such as a local area network or the Internet.

Please replace paragraph [35] with the following paragraph:

[35] As an example, refer to FIG. 1 and ~~the~~ an ADSL modem example. In the real-time operating environment 100, the communication device 101 (*e.g.*, an ADSL modem) ~~101~~ may operate over a period of time on the input data 107, input samples 105, and commands 106. During real-time operation, the recording software platform 103 within the ~~ADSL modem~~communication device 101 causes the recording of the input data 107, input samples 105, and commands 106, perhaps writing this information directly to the memory device 102 (*e.g.*, a hard disk) ~~102~~. In such a scenario, the ~~ADSL modem~~communication device 101 may be a PCI card that is plugged into a PC, which in turn includes the ~~hard disk~~memory device 102.

Please replace paragraph [36] with the following paragraph:

[36] Referring then to FIG. 2, in the non-real-time playback environment 200, the ~~PC~~ computer 202 (*e.g.*, a PC), which may be the same ~~PC~~ computer that houses the ~~hard disk~~memory device 102, reads the recorded input data, input samples, and commands 104 from

the ~~hard disk~~memory device 102. The ~~PC~~ computer 202 runs the playback software 204 that operates a model of the communication device ~~ADSL modem~~ 101 in accordance with the recorded input data, input samples, and commands 104 in non-real-time. This provides the opportunity for an operator to analyze the real-time operation of the ~~ADSL modem~~communication device 101 in non-real-time.

Please replace paragraph [37] with the following paragraph:

[37] In accordance with an aspect of the present invention, the memory device 102 (*e.g.*, a hard disk) ~~102~~ and the communication device 101 (*e.g.*, an ADSL modem) ~~101~~ may be integrated into the computer 202 (*e.g.*, a PC) ~~202~~. In accordance with an alternative aspect of the present invention, the communication device 101 ~~ADSL modem~~ may be a standalone device that is connected to the phone lines on one end and to a ~~PC~~ computer 202 on the other end via, for example, an Ethernet connection. In such a configuration, the ~~ADSL modem~~communication device 101 may forward the input data, input samples, and commands to the ~~PC~~ computer 202 over the Ethernet connection. The ~~PC~~ computer 202 then may include recording software instructions, which when executed, cause the capture and recordation of the input data, input samples, and commands to the ~~hard disk~~memory device 102.